



November 2013

Simocybe Notebook 1

L. R. Hesler

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Emoocybe

Nova Hedwigia Berhefte 44. 1973
by Singer.

[As of Oct 10, 1974, it has not yet arrived
at U-T Library]

Also Krypta 9: 128. 1946

SIMOCYBE

Species listed in Singer, Agar., p. 588.

alachuana (Murr.)Sing.
 (Lloydia 9:129. 1946)
 atomacea (Murr.)Sing.
 (Lloydia 9:146.)
 Atylospora atomacea Murr.
 (syn. atomacea, Naucoria)
 centunculus (Fr.)Karst.
 citrinipes (Murr.)Sing., Sydowia 4:147.
 curvipes (Sing.)Sing.
 junquillea Sing.
 melleiceps (Murr.)Sing., Sydowia 4:147.
 olivaceonana (Sing.)Sing.
 olivaceiceps (Sing.)Sing.
 ovalis Sing.
 pallidissima (Sing.)Sing.
 pantaleodes (Sing.)Sing.
 polytropa (sing.)Sing.
 polytropoides Sing.
 praeandina (Sing.Sing.
 reducta (Fr.)Karst.
 reductoaffinis Sing.
 rubi (Berk.)Sing.
 serrulata (Murr.)Sing.
 subolivacea (Murr.)Sing.
 subvelutina (Sing.)Sing.
 sumptuosa (Orton)Sing.
 tepeitensis (Murr.)Sing.
 tihiophila (Pk.Sing.
 tuckumana Sing.
 unicolor (Pk.)Sing.

NAUCORIA ALACHUANA Murr.

Lloydia 5: 149. 1942.

Simocybe alachuana (Murr.) Sing., Lloydia 9: 128. 1946.
Type

Pileus 1.5 cm broad, convex, not fully expanding, avellaneous-isabelline, margin white, even, densely tomentulose. Context very thin, grayish; odorless.

Lamellae squarely adnate, dark avellaneous, edges white-fringed, plane, close, medium broad, inserted.

Stipe 2-2.5 cm long, 2-3 mm thick, pallid or isabelline, apex striate and pulverulent, elsewhere glabrous, base white and slightly enlarged, hollow.

Notes by Hesler

Spores (5.5)6-8 x 4-5 μ , slightly inequilateral and subreniform in profile, ellipsoid in face view, wall smooth and medium thin, no germ pore, pale yellowish (melleous) in H₂O and in Melzer's reagent, pale yellowish brown in 2% KOH. Basidia 23-28 x 6-7 μ , (2)4-spored. Pleurocystidia 27-34 x 6-8 μ , clavate-appendiculate, scattered, buried or protruding slightly; cheilocystidia 30-48 x 5-9 μ , abundant in tufts, subcylindric-capitate. Gill trama of subparallel hyphae, 3-5 μ broad. Pileus trama of interwoven hyphae. Pileus cuticle of repent hyphae, bearing numerous tufts of pileocystidia, 26-57 x 5-7(13) μ , mostly subcylindric and capitate or subcapitate, more rarely flask-shaped (ampullaceous).

Stipe cuticle of repent hyphae, with tufts of epicuticular hyphae, the terminal elements occasionally as caulocystidia similar to cheilocystidia. Clamp connections and incrustations none observed.

Type, leg. Murrill, on oak branch, in a low hammock, Gainesville, Florida, Jan. 15, 1940 (F 19305).

Although Murrill's color-description suggests a pinkish cinnamon, he comments that it is a small grayish species with beautifully fringed gills, and blunt spores which are inequilateral and bean-shaped.

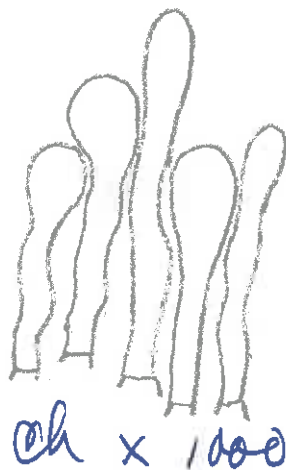
This species is transferred by Singer to Simocybe
[S. alachuana (Murr.) Sing.]

Nauvoria alachuana Murr.

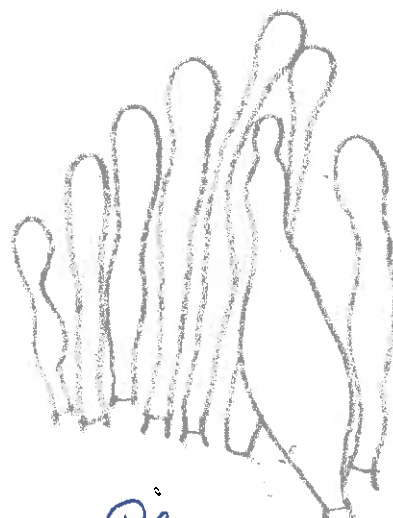
Type - 7 19305



Ch $\times 1000$



Ch $\times 1000$



Piles. $\times 1000$



Profile



Face

Spores $\times 8000$

NAUCORIA ALACAHUANA Murr.

Co-Type (F 19317)

On oak log, in low hammock, near Gainesville, Fla., leg.

Arnold, West, and Murrill, Jan. 16, 1940.

Notes by Hesler

Spores 6.5-8 x 4-5 μ , inequilateral to reniform or subreniform in profile, ellipsoid in face view, smooth, wall medium thin, no germ pore, not truncate, yellowish brown in 2% KOH. Pleurocystidia 25-32 x 6-7 μ , clavate-appendiculate, scattered, inconspicuous; cheilocystidia 28-43 x 5-8 μ , subcylindric-capitate. Pileus cuticle of repent hyphae; pileocystidia in tufts, similar to cheilocystidia.

= Smicocle alachuana (Murr.) Sing.

NAUCORIA ALACAHUANA Murr.

Co-Type (F 19317)

On oak log, in low hammock, near Gainesville, Fla., leg.

Arnold, West, and Murrill, Jan. 16, 1940.

Notes by Hesler

Spores 6.5-8 x 4-5 μ , inequilateral to reniform or subreniform in profile, ellipsoid in face view, smooth, wall medium thin, no germ pore, not truncate, yellowish brown in 2% KOH. Pleurocystidia 25-32 x 6-7 μ , clavate-appendiculate, scattered, inconspicuous; cheilocystidia 28-43 x 5-8 μ , subcylindric-capitate. Pileus cuticle of repent hyphae; pileocystidia in tufts, similar to cheilocystidia.

Imray

Naucoria atomacea Murrill

Murrill's description (Lloydia 5:152-153. 1942):

"Pileus conic to campanulate, umbonate, not fully expanding, closely gregarious, 1-1.5 cm. broad; surface hygrophanous, uniformly pale-chestnut-brown, conspicuously radiate-striate, white-atomate; margin entire, straight when young; context thin, hygrophanous, pale-umbrinous, odorless, slightly bitter; lamellae adnexed, ventricose, broad, subdistant, the inserted ones narrower, pale-umbrinous, the edges beautifully white-beaded at regular intervals; spores subtriangular in outline, broadly ovoid, smooth, pale-purplish-brown in mass, 1-guttulate, about $6 \times 4.5 \mu$; stipe cartilaginous, equal, smooth, dull-rosy-isabelline, white-atomate like the pileus, about 1.5 x 0.1 cm.

"Type collected by W. A. Murrill on a rotten sweet-gum log in a low hammock at Magnesia Springs, Fla., Feb. 11, 1939 (F 18762). A small species, brown throughout, covered when young with minute white particles. The dark gills are ornamented along their edges with clumps of white fringe."

NAUCORIA CITRINIPES Murr.

Florida Acad. Sci. Proc. 7:124. 1945

Simocybe citrinipes (Murr.) Sing. (non sensu Watling)
Type (F 15450)

Pileus 1 cm broad, solitary, convex to subexpanded, uniformly fumosus-avellaneous, dry, smooth, finely pruinose, margin even, deflexed. Context very thin, pallid.

Lamellae slightly sinuate, pallid to isabelline, narrow, close, inserted, edges fimbriate.

Stipe 2 cm long, 1 mm thick, citrinous, pruinose, shining, striate, subequal, base white-mycelioid.

Notes by Hesler

Spores (5.5)6.5-8 x 4-5 μ , inequilateral to subreniform in profile, broadly ellipsoid to ellipsoid or subovoid in face view, smooth, germ pore none, pale yellowish in water, and in Melzer's reagent, slightly darker (yellowish brown) in 2% KOH. Pleurocystidia none; cheilocystidia 28-40 x 6-10 μ , ventricose to clavate. Gill trama of subparallel hyphae, 3-4 μ broad. Pileus cuticle of dry, repent hyphae; pileocystidia not found. Stipe cuticle of dry, repent hyphae. Epicuticular hyphae of pileus at times incrustated.

Type (F 15450) collected by West and Murrill, on decayed deciduous wood, Kelly's Hammock, near Gainesville, Florida, August 3, 1938.

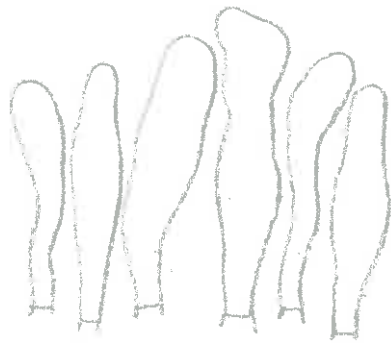
This seems to be a Simocybe sensu Singer (pileus cuticle a trichodermium), but not Simocybe sensu Watling (pileus cuticle cellular). It may be a Inbaria.

Although the pileus is pruinose, I failed to find pileocystidia. (The material of the type is sparse.)

Singer transferred it to: Simocybe citrinipes (Murr.) Sing., but it may be a Tubaria (sensu Watling). It is noted in Singer (1962: 588) that he places it in a group (of Simocybe) of species in which ~~the~~ a large percentage of the spores are phaeoconiform-remiform, but in N. citrinipes Murr. (type), only a few are remiform.

Naucoria extrimpes Murr.

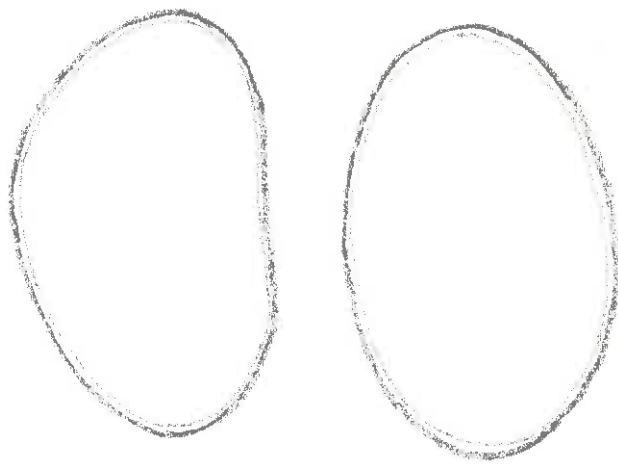
Type (7 15450)



ch $\times 1000$



Encrusted epicuticular
hypha - $\times 1000$



Profile

Face

Spores $\times 8000$

SIMOCYBE MELLEICEPS (Murr) Singer

Galerula melleiceps Murr., Fla. Acad. Sci. Proc. 7:119. 1945.

Notes on Type (by Hesler) - F 15910

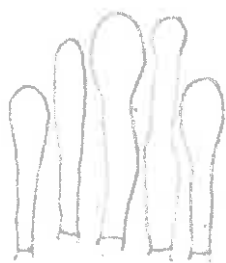
Spores 6.5-7.5 x 4.5-5 μ , subreniform in profile, ellipsoid in face view, smooth, no germ pore, wall double, about 0.3 μ thick, yellowish brown in 2% KOH. Pl none; ch 22-30 x 4-7 μ , subcylindric-capitate or clavate, more rarely subcylindric. Pileus cuticle a trichodermium, terminal elements appear to be pileocystidioid (material not good).

My study not satisfactory; material very sparse.

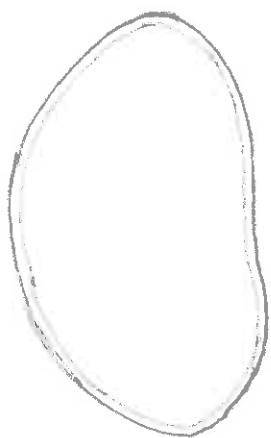
August 1974.

L. R. Hesler

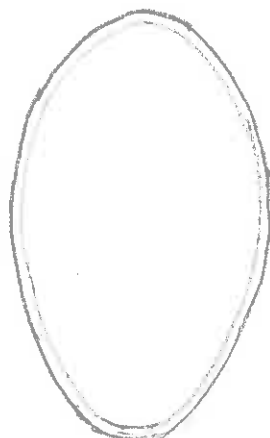
Smicophya melleiceps (Murr.) Sing.
[= Galerula melleiceps (Murr.) -
Type: 715910



Ch x 1000



Profile



Face

Spores x 8000

Smiocephale semiglobata (Murr.) Sing.
Phydia 9: 128. 1946.

[*PHOLIOTA SEMIGLOBATA* (Murr.) comb. nov. (?)]

Galerula semiglobata Murr., Mycologia 35:531. 1943.

Murrill's Description

Pileus 1 cm broad, hemispheric, uniformly pale-isabelline, slightly viscid, subglabrous, margin even, straight. Context membranous, pallid; odorless.

Lamellae sinuate, pallid to isabelline, edges beaded, white and fringed, very broad, slightly ventricose, rather distant.

Stipe 1 cm long, scarcely 1 mm thick, equal, glabrous, base whitish-tomentose.

Notes by Hesler

Spores 7-9 x 4-5 (5.5) μ , slightly reniform in profile, ellipsoid in face view, wall thin, smooth, no germ pore observed, pale yellowish brown in 2% KOH. Pleurocystidia none; cheilocystidia none (?), Pileus cuticle seems to be of repent hyphae. Stipe cuticle of repent hyphae, bearing scattered caulocystidia, 34-46 x 6-7 μ , more or less clavate or subcylindric.

Type on dead oak wood, Arredonda, Florida, July 29, 1938, F 17984

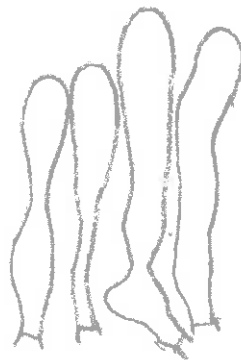
Murrill appends notes by Singer, as follows:

(Copy marked paragraph, attached)

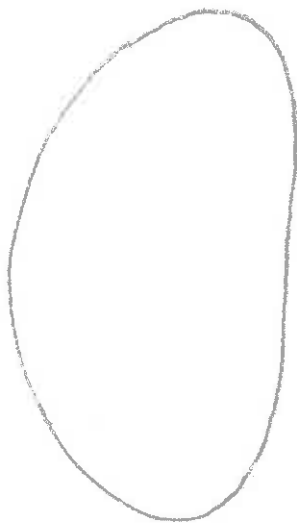
The spores suggest Pholiota, but the material is sparse, and inadequate for a satisfactory study.

"According to Singer, 'Spores $6.7-9 \times 3.5-5 \mu$, smooth, rather thin-walled, melleous, subglobose (rarely) to reniform, without a germ-pore. Basidia $13.5-22 \times 6.7-7.2 \mu$. Cheilocystidia clavate or filamentose with a large, rounded, capitate apex, or subfusoid-cylindric with rounded apex, numerous, hyaline to pale-melleous, smooth, $47-65 \times 6.8-11.5 \mu$. Cystidia none. Epicutis of the pileus formed by fusoid or subfusoid, not distinctly incrustated and not very thick-walled (wall $0.4-0.6 \mu$), erect or semi-erect dermatocystidia, the terminal portion (from the last septum) $65-70 \times 8-10 \mu$; clamp connections constantly present.'"

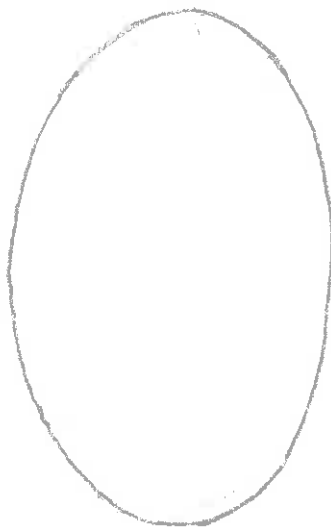
Pholiota semiglobata (Murr.) comb. nov.
(*Galerula*) - Type 717984



Conidia -
x 1000



Profile



Face

Spores x 8000

NAUCORIA SERRULATA Murr.

North Amer. Flora 10:178. 1917

Simocybe serrulata (Murr.) Singer

Pileus 2-2.5 cm broad, convex to subexpanded, hygrophanous, very uniform in color, umbrinous-fulvous, glabrous, margin striate. Context taste mild.

Lamellae adnate, sometimes seceding in age, umbrinous-avellaneous, edges grayish serrulate, broad, rather crowded.

Stipe 2-2.5 cm long, 2 mm thick, pallid or somewhat umbrinous, glabrous, sub-equal.

Notes by Hesler

Spores 7-9 x 4.5-5 μ , inequilateral to subreniform in profile, ellipsoid in face view, smooth, wall medium thick, no germ pore, pale yellowish in water, and in Melzer's reagent, pale yellow brown in 2% KOH. Pleurocystidia none; cheilocystidia 30-56 x 6-15 μ , clavate to ventricose, usually more or less capitate, abundant and conspicuous. Gill trama of subparallel hyphae, 4-8 μ broad. Pileus trama of loosely interwoven hyphae. Pileus cuticle of repent hyphae, bearing a trichodermium of numerous, gregarious or tufts of pileocystidia, 40-80 x 5-10 μ , ventricose, cylindric-capitate, conspicuous. (Stipe material sparse, and no sections prepared.)

Type (Murrill 13) collected on beech log in woods, Lake Placid, Adirondack Mts., New York, July 17-29, 1912.

NAUCORIA SUBOLIVACEA Murr.

North Amer. Flora 10:182. 1917

Simocybe subolivacea (Murr.) Singer,

Type

Pileus 1 cm broad, convex to plane, uniformly dull-olivaceous, appearing hygrophanous and glabrous but finely pubescent under a lens, margin not striate, concolorous.

Lamellae adnate, pale melleous, edges pallid and serrulate, slightly ventricose, narrow, crowded, several times inserted.

Stipe 1 cm long, 1.5 mm thick, hygrophanous, pale-melleous, finely pulverulent, equal, cylindric.

Notes by Hesler

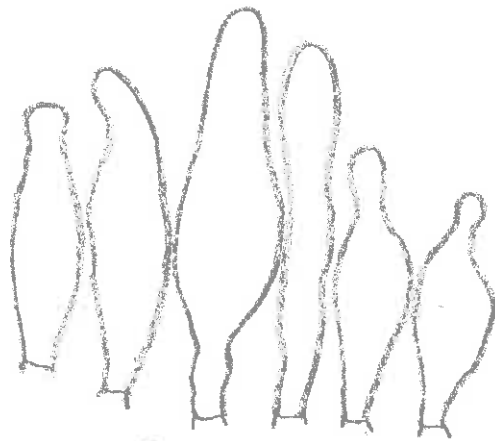
Spores 5.5-7 x 4-5 μ , slightly inequilateral in profile, ellipsoid to subovoid (or occasionally subrhomboid) in face view, wall slightly thickened (more or less 0.25 μ), smooth, no germ pore. Basidia 17-20 x 4-5 μ , 4-spored. Pleurocystidia none; cheilocystidia none found (material very sparse). Pileus cuticle of irregularly shaped cells, the surface bearing pileocystidia, 33-55 x 7-15 μ , ventricose or occasionally subcylindric-subclavate. Stipe material not available.

Type on rotten wood, Tepeito Valley, near Cuernavaca, Mexico, coll. Murrill No. 472, Dec. 28, 1909.

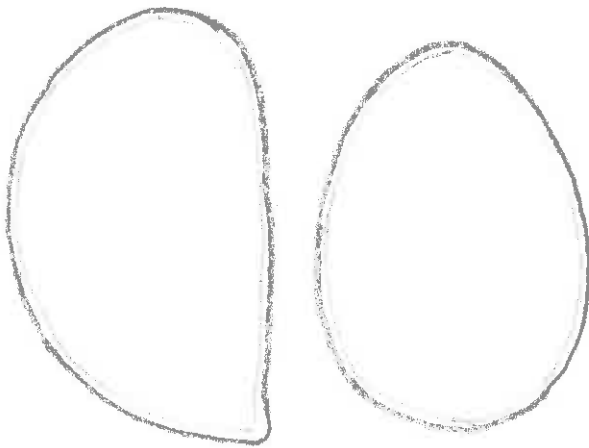
Material of the type consisted of only a fragment of a pileus, quite insufficient for a satisfactory study. Cheilocystidia probably present, but not observed.

Kanconia subolivacea Murr.

Type [= *Simocybe subolivacea* (Murr.) Sing.



Pileocyptidia



Spores x 8000

NAUCORIA TEPEITENSIS Murr.

Mycologia 4:79. 1912

Simocybe tepeitensis (Murr.) Sing.,

Type

Pileus up to 12 mm broad, convex, whitish, hygrophanous, smooth, faintly striate over the ~~the~~ lamellae, margin entire, inrolled when young.

Lamellae free to adnate, whitish dull, edges white and crenulate, broad, distant, several times inserted.

Stipe 1 cm long, about 1 mm thick, whitish, hygrophanous, base white-mycelioid, glabrous, slightly enlarged above, crooked.

Notes by Hesler

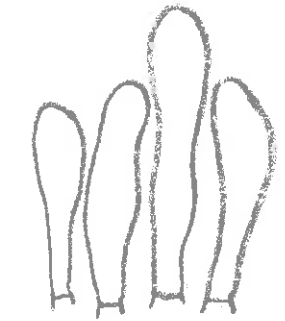
Spores 5.5-7 x 4-5 μ , slightly inequilateral in profile, very few subreniform, ellipsoid to subovoid in face view, melleous in KOH, smooth, no germ-pore, wall slightly thick. Basidia 20-24 x 4-5 μ , 4-spored. Pleurocystidia none; cheilocystidia 25-37 x 6-8 μ , subventricose to clavate. Pileus cuticle cellular. Pileocystidia 26-35 x 5-7 μ , subventricose, scattered. Stipe material not sufficient for sectioning.

Type on rotten log, Tepeite Valley, near Cuernavaca, Mexico, leg. Murrill, No. 485, Dec. 28, 1909.

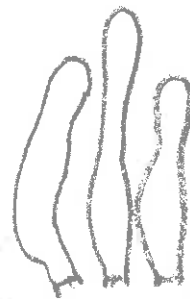
Differs from N. subolivacea in which the pileus is olivaceous, not striate; gills narrow, crowded; different pileocystidia.

Naucoria tepetitensis Murr.

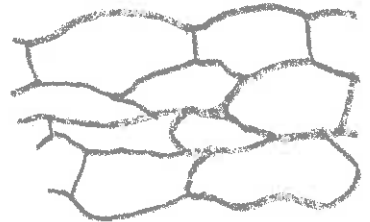
Type [= *Simocybe tepetitensis* (Murr.) Sing.]



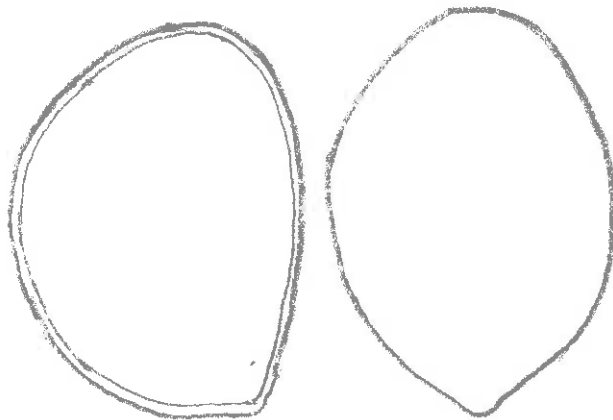
Ch x 1000



Palps x 1000



Pileus cuticle
x 1000



Spores x 8000

SIMOCYBE TILIOPHILA (Pk.) Sing.

Agaricus tiliophilus Pk., N. Y. State Mus. Ann. Rept. 35:133. 1884.

Naucoria tiliophila (Pk.) Sing., Mycologia 35:163. 1943.

(Description by Singer, Mycol. 35:163, covering fresh and type material.)

Pileus 8-25 mm broad, watery brownish and somewhat hygrophanous, buffy brownish when dry, not viscid, at somewhat pruinose or faintly rivulose, margin sub-incurved when young, transparent striatulate when moist. Context almost concolorous, thin; odor none.

Lamellae adnate or adnexed, argillaceous brown, very broad, moderately close.

Stipe 5-20 mm long, 1-5 mm thick, eccentric or central, pale brownish, sometimes whitish or light buff, somewhat longitudinally fibrillose, often distinctly white pubescent at base, equal or subequal, straight or more or less curved, eventually hollow.

Spores in deposit: dirty brownish, $6.5-8 \times 4.2-5.5 \mu$, ovoid, rather pale under the microscope, smooth, with a rather thin not distinctly double wall, germ-pore not seen. Pleurocystidia lacking; cheilocystidia $25-40 \times 4.5-10 \mu$, clavate. Dermatocystidia $16-36 \times 4.5-8 \mu$, broadly cylindrical, clavate, or bottle-shaped, numerous (forming the pruinosity), as terminal elements of epicuticular hyphae. Pileus cuticle not hymeniform.

by Singer?

Fresh material collected in Purgatory Swamp, Norwood, Mass.

Notes on Type, next sheet.

Simocybe tiliophila (Pk.) Sing.

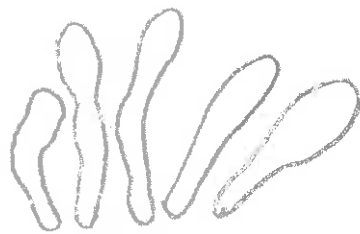
CREPIDOTUS TILIOPHILUS (Pk.) Sacc. = Simocybe

coll. Peck, Type Aug.
(from East Berne, N. Y.)

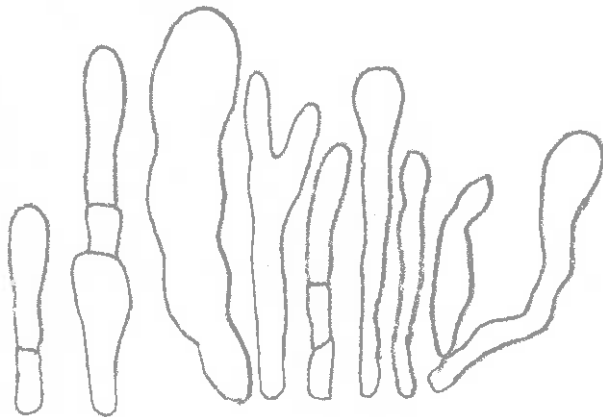
Spores 5.5-7 x 4-4.5 μ , ellipsoid to subovoid, smooth, pale fuscous under 'scope. Basidia 17-21 x 5-6 μ , 4-spored. Pleurocystidia none; cheilocystidia 18-29 x 4-8 μ , clustered, clavate, colorless. Gill trama subparallel. Pileus trama interwoven. Cuticle not sharply differentiated; the surface hyphae give rise to erect, brownish, clavate cystidioid hyphae, scarcely in a palisade nor a trichodermium. Clamp connections none (Singer says usually present, Agar. 2nd ed., p. 586).

Singer (Lilloa 13:87) says it was transferred to Naucoria (Mycologia 35:163. 1943). In Agar. (2nd ed.) p. 588, he places it in Simocybe.

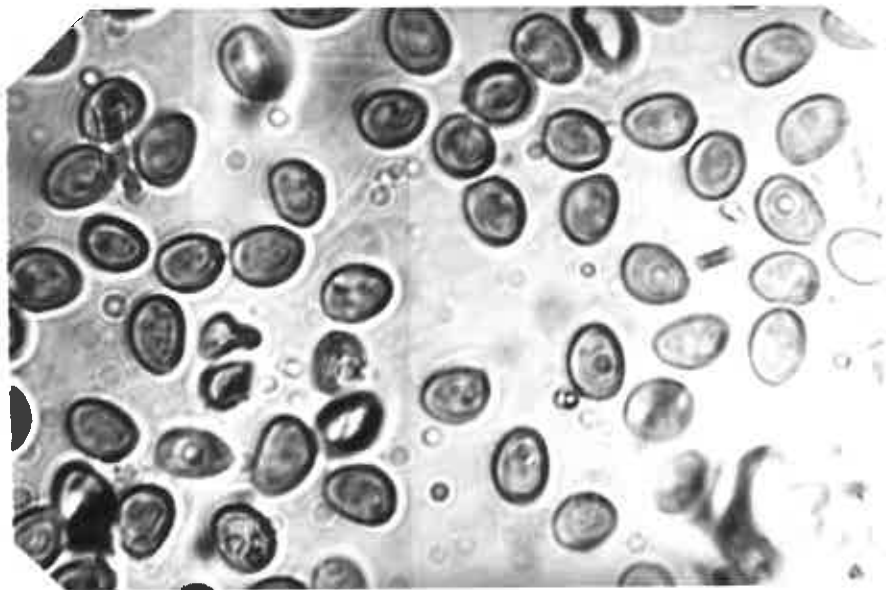
Crepidatus tiliophilus (PK.) Sacc.
Type = *Simocybe tiliophila* (PK.) Sing.



Ch - x 1000



Pileocyphidia - x 1000



Crepidotus tiliophilus Pk. - Spores of type

26132 SIMOCYBE TILIOPHILA (Pk.) Singer

Agar. 2nd ed., p. 588. 1962

Agaricus (Crepidotus) tiliophilus Pk., New York State Mus.

Ann. Rept. 35:133. 1884.

Crepidotus tiliophilus (Pk.) Pk., New York State Mus. Ann.

Rept. 39:70. 1886.

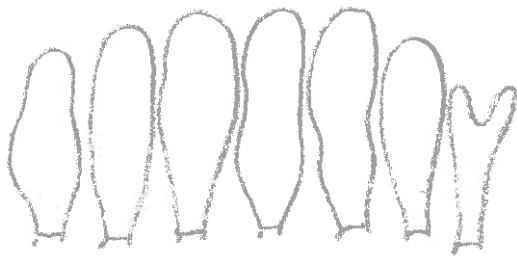
Naucoria tiliophila (Pk.) Sing., Mycologia 35:163. 1943.

[See: description, N. A. Species of Crepidotus, p.
141, 1965]

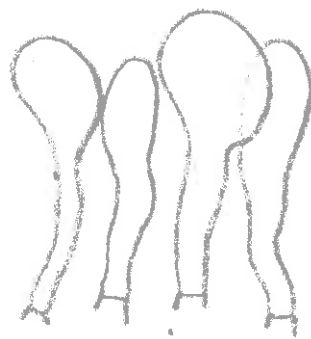
Spores 4.5-5.5(7) x 4-4.5 μ , subglobose to short-ellipsoid, occasionally subovoid, wall relatively thick, smooth, germ-pore (if any) not evident, pale yellowish brown in 2% KOH. Pleurocystidia none; cheilocystidia 20-28 x 7-10 μ , clavate to subcylindric, apices rarely forked. Pileus cuticle of rather broad, brownish, interwoven, often incrustated, hyphae forming a trichodermium, the terminal elements as pileocystidia, 32-38 x 7-14 μ , clavate.

Smocyele tiliophila (Pk.) Fung.

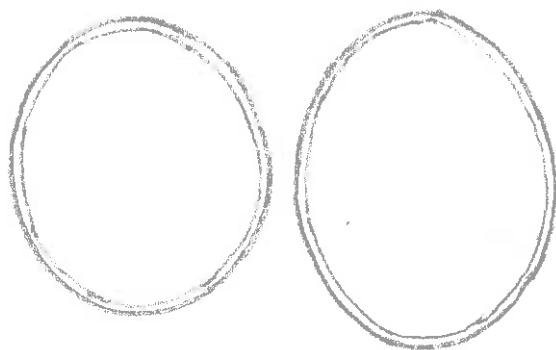
Term - 26132 (leg. Shaffer, N.Y.)



Ch $\times 1000$



Piles $\times 1000$



Spores $\times 8000$

NAUCORIA UMBRINICEPS Murr.

North Amer. Flora 10:178. 1917

Simocybe umbriniceps (Murr.) comb. nov.

Type

Pileus about 1 cm broad, convex to subexpanded, slightly umbonate when young, hygrophanous, umbrinous with an isabelline tint, glabrous, zonate when fresh.

Lamellae sinuate, fulvo-umbrinous at maturity, edges pallid-serrulate, broad, subdistant, plane.

Stipe 2 cm long, 1.5 mm thick, dull-brownish-pallid, pruinose to glabrous, tough, tapering upward.

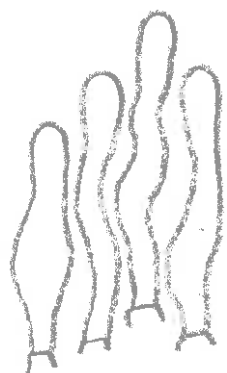
Notes by Hesler

Spores 5-7 x 3.5-4.5 μ , inequilateral and often reniform in profile, ellipsoid in face view, smooth, no germ pore, wall medium thin. Pleurocystidia none; cheilocystidia subcylindric. 30-38 x 4-7 μ , ventricose to ~~subcylindric~~. Pileus cuticle of brown, repent hyphae. Pileocystidia gregarious or in tufts, 28-52 x 6-15 μ , more or less ventricose to subclavate, brownish. (Stipe material sparse, and no sections prepared.)

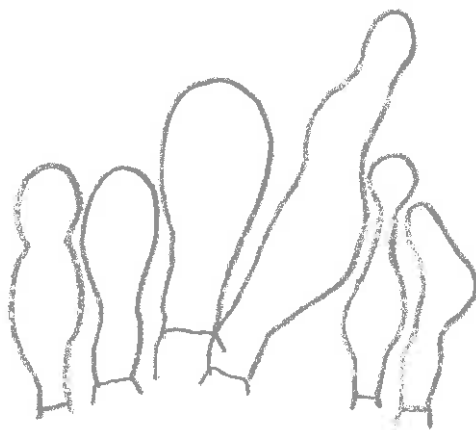
Type collected by Murrill (No. 189) on dead deciduous wood, Lake Placid, Adirondack Mts., New York, July 17-29, 1912.

Nanocoria umbriniceps Murr.

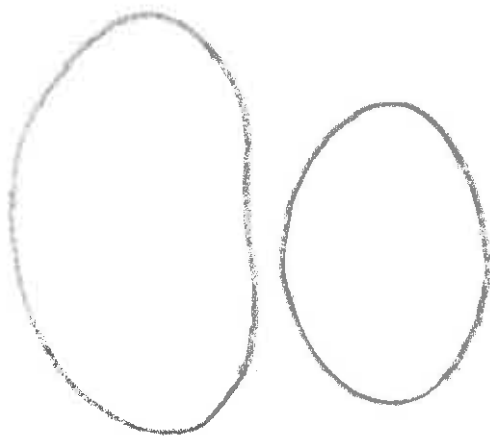
Type [= Smicogyte umbriniceps (Murr.) comb. nov.]



Ch x 1000



Pileo - x 1000



Spores x 8000

NAUCORIA UNICOLOR Pk.

New York State Mus. Ann. Rept. 41:68. 1888

Simocybe unicolor (Pk.) Singer.

Type

Pileus 1.2-2 cm broad, broadly convex, plane or slightly depressed, hygrophanous, yellowish-brown and striatulate on the margin when moist, paler when dry, glabrous. Context thin.

Lamellae slightly rounded behind, colored like the pileus, thin, close.

Stipe 2.5 cm long, 1-2 mm thick, colored like the pileus, with white mycelium at the base, equal, tough, hollow, glabrous.

Spores 6-7.5 x 5 μ , brownish-ferruginous, broadly ellipsoid.

Notes by Hesler

The Type is composed of stipe fragments, no pileus material.

Type on decayed wood and old stumps of deciduous trees, Selkirk, New York, August.